



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Brian S. HILTON et al.

Group Art Unit: 2861

Application No.: 10/751,518

Examiner: A. VO

Filed: January 6, 2004

Docket No.: 117058

For: SYSTEMS, METHODS AND STRUCTURE FOR MAXIMIZING EFFICIENCY OF
REFILLABLE FLUID EJECTION HEAD

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

After entry of the Notice of Appeal filed herewith, Applicants request review of the final rejection mailed February 6, 2006 in the above-identified application.

I. Status of Pending Claims

Claims 1-20 are pending in this application. Claims 1-20 are rejected. No amendments are being filed with this request.

II. Grounds of Rejection Presented For Review

The Final Rejection mailed on February 6, 2006 objects to claim 1 because (1) the recitations "one" and "the level" in claim 1 lack proper antecedent basis; (2) rejects claims 7-14 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite; (3) rejects claims 1, 2, 4-7, 9-13, 15, 16, 18 and 19 under 35 U.S.C. §102(b) over U.S. Patent No. 6,390,611 (Kobayashi); and (4) rejects claims 1-20 under 35 U.S.C. §102(b) over U.S. Patent No. 6,022,102 (Ikkatai). Claims 1 and 7 were amended in the Amendment After Final Rejection filed on April 21, 2006 to overcome the objection of claim 1 and the rejection of claim 7 under 35 U.S.C. §112, second paragraph. The Advisory Action mailed on May 8, 2006 indicates that the amendments to the claims were entered but that the claims remain rejected in view of the references.

Accordingly, the following rejections are presented for review: (A) the rejection of claims 1, 2, 4-7, 9-13, 15, 16, 18 and 19 under 35 U.S.C. §102(b) over U.S. Patent No.

6,390,611 (Kobayashi); and (B) the rejection of claims 1-20 under 35 U.S.C. §102(b) over U.S. Patent No. 6,022,102 (Ikkatai).

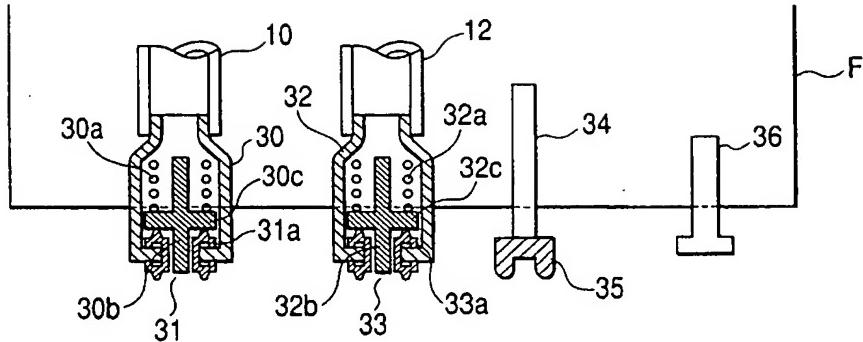
Independent claims 1, 7 and 15 recite a venting port and a fluid inlet port each having an open end or an opening, the open end or opening of each of the venting port and fluid port being located at substantially the same level, in a gravitational direction, to increase biometric efficiency and reduce staining, and/or both of the open ends or openings being exposed to the atmosphere at substantially the same level, in a gravitational direction.

Kobayashi and Ikkatai, as well as all of the other cited references of record, whether taken alone or in any combination, fail to disclose the features of independent claims 1, 7 and 15.

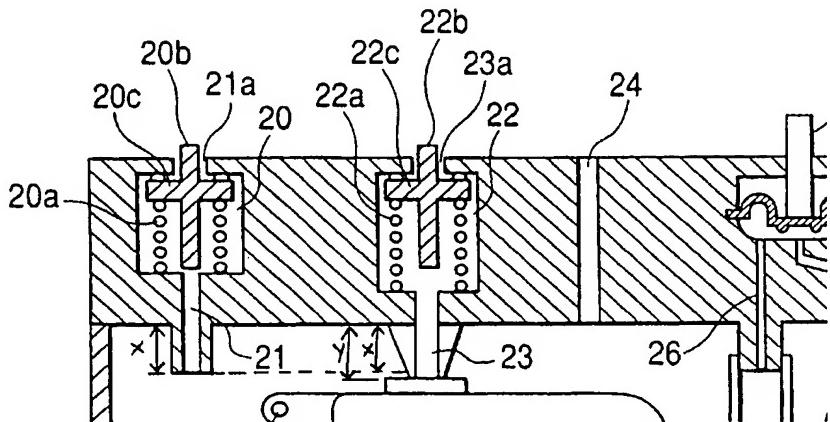
(A) Rejection Under 35 U.S.C. §102(b) over Kobayashi

In the February 6, 2006 Final Rejection, the Examiner asserts that Kobayashi discloses a venting port (23) having an open end and a fluid inlet port (21) having an open end. The Examiner cites Fig. 3 of Kobayashi and further asserts that Kobayashi discloses that the open end of the venting port (23) and the open end of the fluid inlet port (21) are located at substantially the same level, in a gravitational direction.

However, Fig. 3 of Kobayashi merely illustrates an ink storage chamber of a replenishment unit. Fig. 3 of Kobayashi appears to show only a portion of the venting port (23) and the fluid inlet port (21), as identified by the Examiner in the Final Rejection. Fig. 3 of Kobayashi is a "broken" figure and the portion of the venting port (23) and the fluid inlet port (21) illustrated in Fig. 3 does not include the open end of either of the venting port (23) or the fluid inlet port (21). The open end of each of the venting port (23) and the fluid inlet port (21) is not illustrated. Fig. 3 is directed to the replenishment unit and not the venting port (23) or the fluid inlet port (21). That is, it is not possible to discern from Fig. 3 of Kobayashi the locations of the open end of the venting port and the open end of the fluid inlet port. Fig. 3 of Kobayashi is reproduced below.

**FIG. 3**

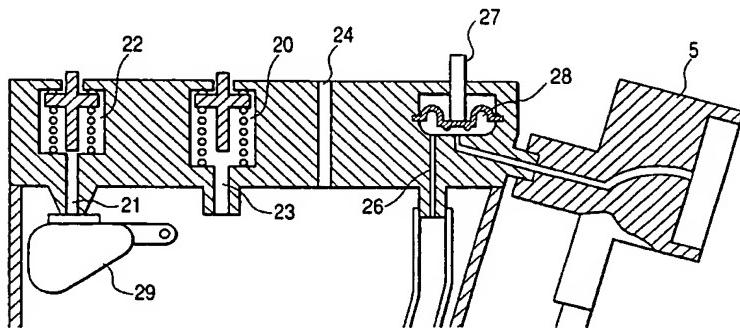
During the April 19, 2006 personal interview with the Examiner, the Examiner cited Fig. 2 of Kobayashi as disclosing that the open end of the venting port (23) and the open end of the fluid inlet port (21) are located at substantially the same level. However, Fig. 2 of Kobayashi clearly fails to show the open ends of the venting port 23 and the fluid inlet port (21) at substantially the same level. For example, a marked-up copy of Fig. 2 of Kobayashi is shown below to more clearly illustrate the deficiency of Kobayashi. In particular, the fluid inlet port (21) is illustrated below with a length X that extends into the reservoir. The venting port (23) is illustrated below with a length Y that extends into the reservoir. The length X and the length Y are not the same. Furthermore, the venting port (23), as illustrated in Fig. 2 of Kobayashi, is not shown with an open end. In Fig. 2 of Kobayashi, the venting port (23) is sealed and thus its end location is uncertain. The marked-up Fig. 2 of Kobayashi is provided below.

FIG. 2

Thus, the figures of Kobayashi clearly show the venting port and fluid port located at different levels. Accordingly, contrary the Examiner's assertion, Kobayashi clearly fails to disclose that the open end or opening of each the venting port and fluid port are located at substantially the same level, in a gravitational direction, as recited in claims 1, 7 and 15.

In the Advisory Action the Examiner asserts that all the claims remain readable on the prior art references. Upon further review of Kobayashi, Fig. 5 appears to be the only disclosure of Kobayashi that even comes close to meeting the Examiner's assertion. As seen below, it is not clear from Fig. 5 whether the venting port and the fluid inlet port are located at the same level. Because the Figures of Kobayashi are not drawn to scale, it is not possible to discern from the Figures whether Kobayashi intends that the opening of the venting port and the fluid inlet port are substantially located at the same level. Furthermore, there is no disclosure in the specification of Kobayashi indicating that the opening of the venting port and the fluid inlet port are at the same level. (Note that in Fig. 5 the inlet port 21 is shown sealed and not "open.")

FIG. 5



A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. See MPEP §2131. Kobayashi clearly does not clearly disclose that the opening of the venting port and the fluid inlet port are substantially located at the same level. Furthermore, there is nothing in the specification or figures to support an argument that this feature is inherent in Kobayashi. Accordingly, because Kobayashi does not expressly or inherently describe that the opening of the venting port and the fluid inlet port are substantially located at the same level, Kobayashi does not anticipate the claimed subject matter.

(B) Rejection Under 35 U.S.C. §102(b) over Ikkatai

The Final Rejection cites Fig. 4 of Ikkatai and asserts that Ikkatai discloses an open end of a venting port (46a) and an open end of a fluid inlet port (46b) located at substantially the same level. However, it is clear that Fig. 4 of Ikkatai fails to disclose these features.

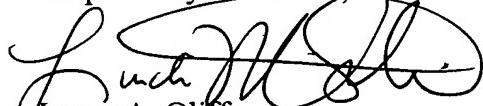
(C) Conclusion

For the foregoing reasons, Kobayashi, Ikkatai, as well as all of the cited references of record, fail to disclose or suggest a venting port and a fluid inlet port each having an open end or an opening, the open end or opening of the venting port and the fluid port being located at substantially the same level, in a gravitational direction, to increase biometric efficiency and reduce staining, and/or both of the open ends or openings being exposed to the atmosphere at the same level, in a gravitational direction, as recited in claims 1, 7 and 15. Claims 2-6, 8-14 and 16-20 depend respectively from claims 1, 7 and 15 and are not anticipated or rendered obvious from the cited references of record, at least for the same reasons discussed above.

III. Conclusion

For all of the reasons discussed above, it is respectfully submitted that the rejections are in error and that all the pending claims are in condition for allowance. Applicants respectfully request the panel of Examiners to allow this application.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Linda M. Saltiel
Registration No. 51,122

JAO:LMS/eks

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OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400